

PHENIX WEEKLY PLANNING



6/24/2010
Don Lynch

2010 Shutdown (Overview)

Start Date End Date

End of run 10 (Party)

Done

Done

Design, Eng'g, fabrication, procurement and site preparation tasks
in support of shutdown tasks

In Progress

12/1

Shutdown Startup Tasks

In Progress

6/30

Gas system maintenance, repair and upgrade

In progress

12/1

PHENIX Infrastructure maintenance, repair and upgrade

In Progress

12/1

Remove RPC Prototypes

In Progress

7/9

Remove HBD

In Progress

7/9

Remove RXNP

6/21

7/9

Remove/Reinstall BBC

6/21

9/16

Remove Re-install MPC

6/21

9/16

RPC3N & MuTrigger unfinished business

7/1

9/30

Remove current BP, install new BP

7/19

9/10

DC/PC maintenance and repair (mid summer)

7/23

8/13

Install RPC3S

8/1

12/1

MuTr maintenance, repair and upgrade

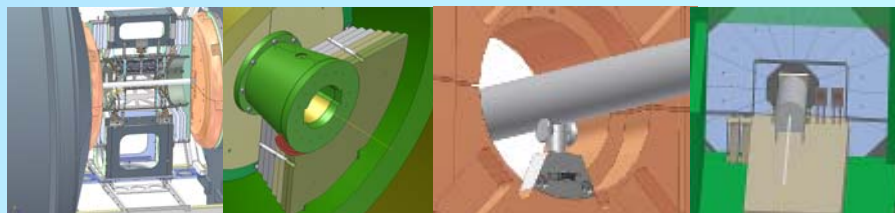
8/1

8/20

Install VTX

9/13

12/1



6/24/2010

Post Run 10 Tasks



TECHNICAL
SUPPORT
2010

Task

Start Date

End Date

Commissioning Tests (HV, Mixed gas and Freon only)

Done?

Done?

Send mass flowmeters out for recalibration (DC/PC, MuID, TOF.W)

In Progress

6/30/2010

AH Crane 110 switch for lockout

In Progress

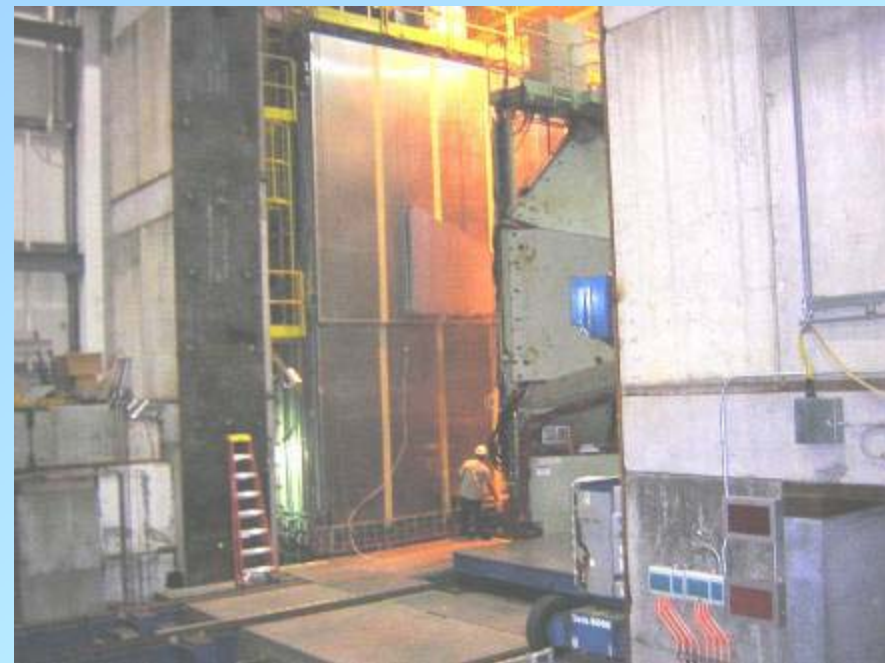
6/30/09

6/24/2010

This Week:

- RPC3N Commissioning/Cosmic Ray Tests end
- Remove south vapor barrier and crystal Palace
- Move MuID colars to AH, Install cart, install decking, install manlift
- MMN & MMS WP's
- Remove RPC2 prototype and services
- Design of survey/installation tools and fixtures for VTX
- Fabrication of parts, installation tools and fixtures for absorber & VTX
- Continue disassembly of HBD, RXNP, BBC, MPC, RPC Prototypes
- Continue RPC3S area prep
- Begin prep of MMS for move to AH
- Future upgrades support

TECHNICAL SUPPORT 2010



TECHNICAL SUPPORT NO-0

6/24/2010

Absorber Design Observations



Need to remove 2 sections of bridge on North side. South side is OK

BBC Cables (both north and south) need to be modified to accommodate the absorbers.

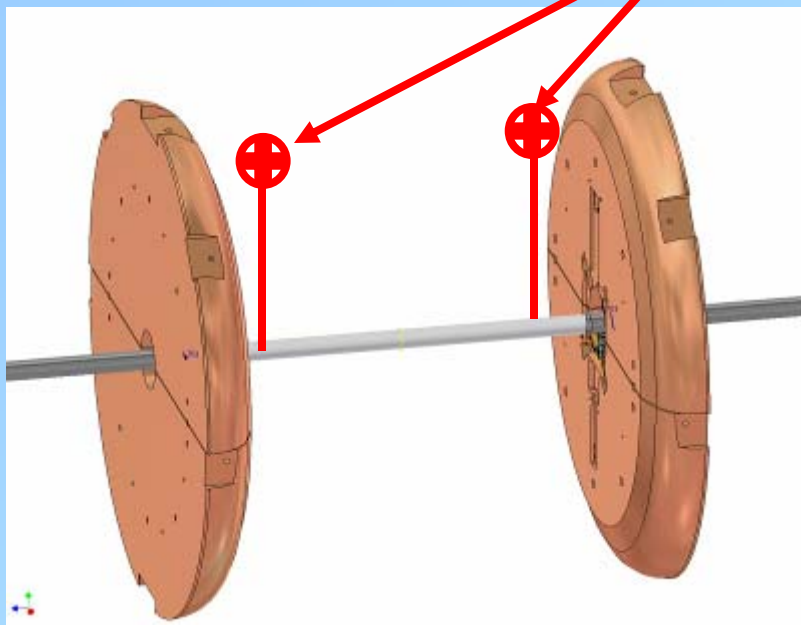


6/24/2010

Next Week

- Complete removal of RPC2 prototype and services
- Continue design of survey/installation tools and fixtures for VTX
- Continue fabrication of parts, installation tools and fixtures for absorber & VTX
- Continue disassembly of HBD, RXNP, BBC, MPC
- Continue RPC3S area prep (legacy check, MuID steel top platforms, lighting, gap r cleaning, start pipes
- Continue prep of MMS for move to AH
- WP's for Absorber, BP & VTX
- Future upgrades support

TECHNICAL SUPPORT 2010

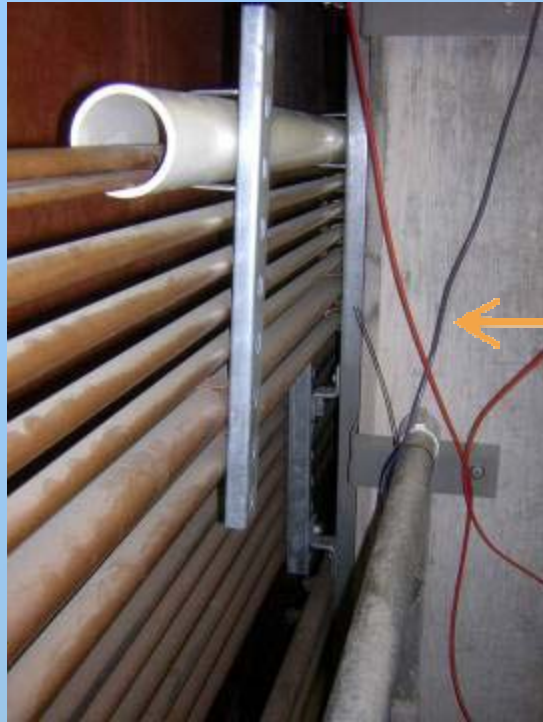


Survey Targets and fixtures TBD
Must be able to align BP to req'd
radial and angular accuracy
without VTX and with VTX in
clamshells open configuration.

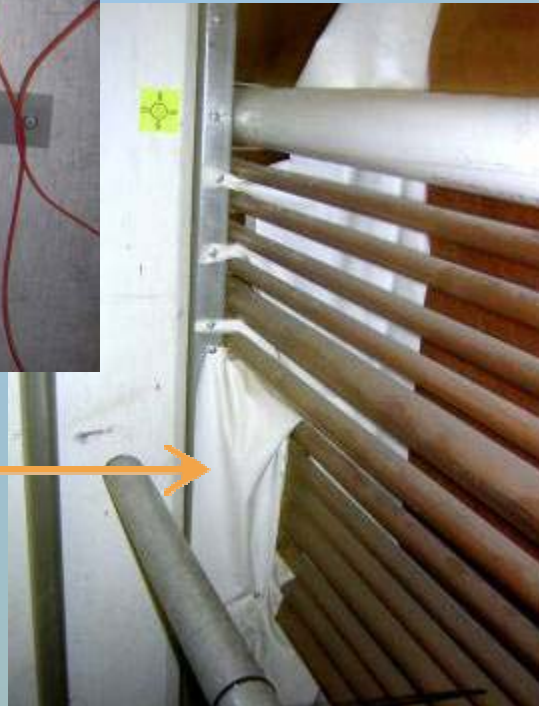
Design in progress

South West in Tunnel

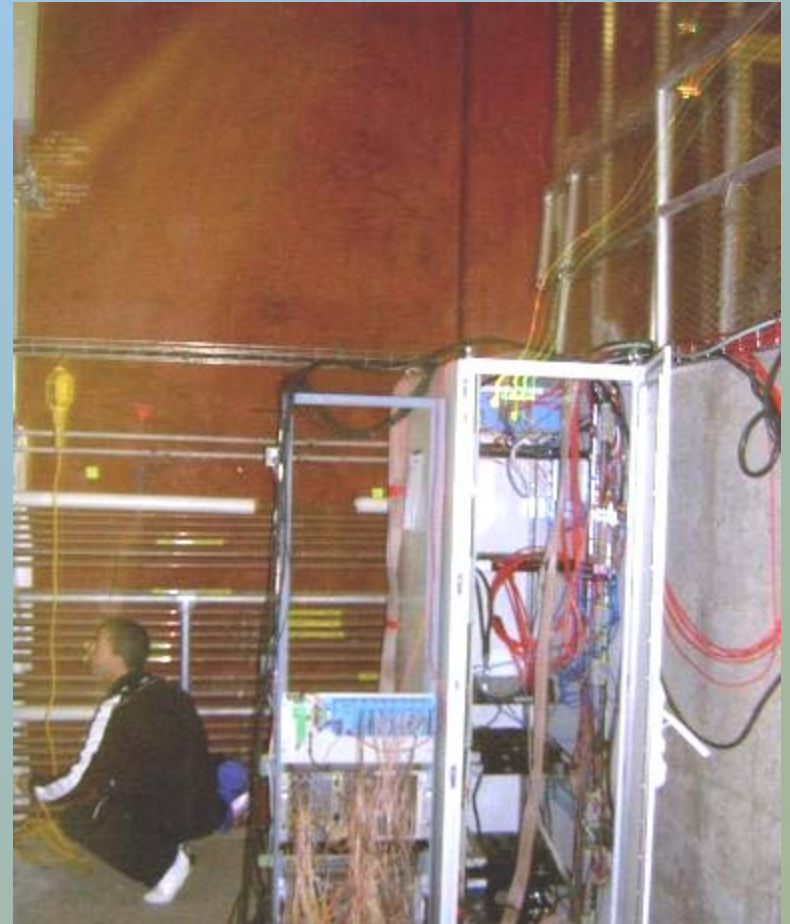
51 Pipes to be re-routed



Pipes go
under beam
pipe



Gap
behind
MuID



All pipes have to be removed to
install RPC.

5/24/2010 5/12/2010

DC West Maintenance Probable Time Schedule

Dates: July 21 - Aug. 13. 18 working days

Step 0. $\frac{1}{4}$ day

General planning meeting

Step 1. 3 days

Start with DAQ running and HV “in hands”

Start gas flow 2.5-3 days

Disassemble electronics, installation of dummy grounds

Transportation boards to SBU, start board testing

Step 2.

Work on HV cards and HV problems, 2-3 days

?? Cut the mylar window for wire removal ??, 1-2 days

Final test with HV

Work on electronics and its test at SBU - 5-7 days

Step 3.

Start signal board and ASD/TMC boards mounting after HV work finished. 2-3 days

Step 4.

Final electronics assembling and testing. 3-5 days

Requested PC maintenance for this summer from Anders Oskarsson (7/23-8/13)

East arm. Pull DC/PC out on permanent rail. Half a day manlift help West arm: Pull DC/PC out on permanent rail. 2 hrs manlift help. (Anders estimates)

In detail We have the following problems to deal with:

EAST ARM

-Packet 4027, 3rd from bottom on PC1E, north side. This has been replaced once. Worked for a while after that but then bad again with the same error. Suspect the white LV connector. Try to locate the problem with measurements with DVM before removal of FEM. If we can verify connector problem we dont need to replace FEM.

-Packet 4031. Second FEM from the top on PC1E north side. No light in DCM fiber according to John. Need to take the board down and replace it. Can possibly be repaired.

Each of these actions need a couple of hours manlift help. Needs East arm to be operable so that functionality after repair can be established. We probably need to pull the DC/PC package out. It should be sufficient to pull it as far as the original rails go. Hopefully that can be done without uncabing the LV and HV.

WEST ARM

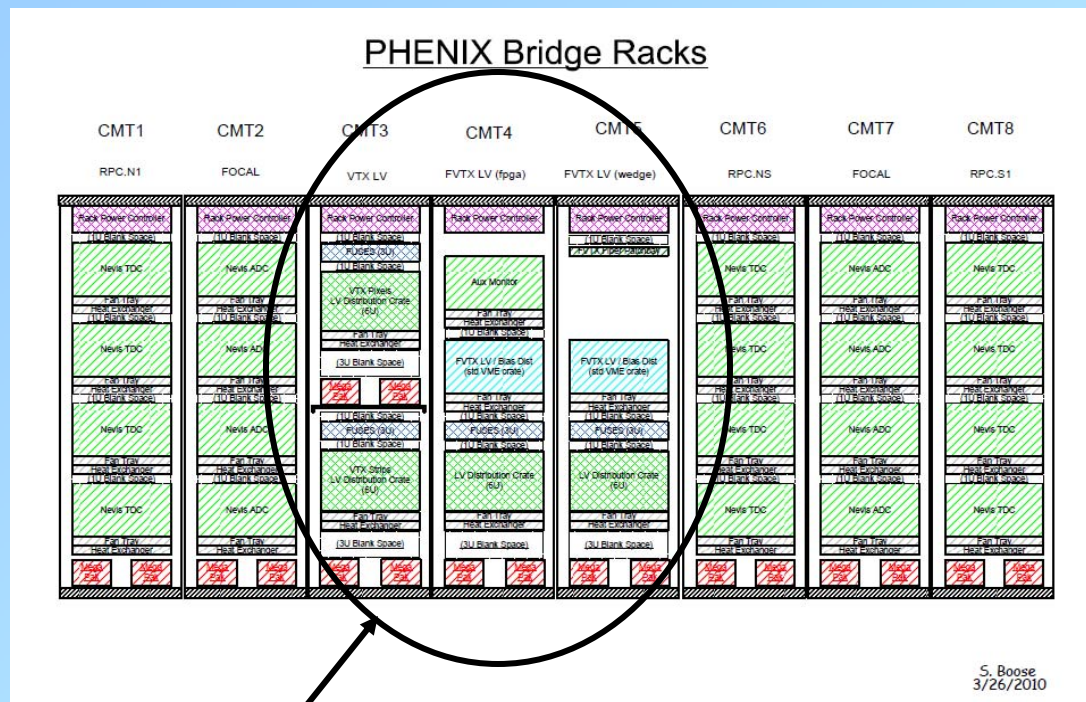
-Packet 4008, PC1W, topmost FEM on south side. This has had an unstable behaviour since the first year of running. Now with CM out I hope it is possible to get there. This would be the first time in 10 years when this is possible. Needs a manlift to get to the FEM. Possibly also to pull out the DC/PCWest out, but since it is the top one one may be able without pulling it out . Need to operate the electronics after change.

-Likely broken wire in PC3_WS_BS1. Verify that its a broken wire. If so, the only thing we can do is to localise the short and disconnect HV to the shorted wires to make the sector operable again. This can be done without help from the 1008 crew and I dont see that it can interfere with anyone since the work is done from inside the mounting boxes for PC2/PC3.

Unfortunately, disconnecting the wires has not been so succesful in the past since the broken wire tends to move and shorts new wires. But this chamber is rather horizontal so gravitation will have small influence on the loose wire.

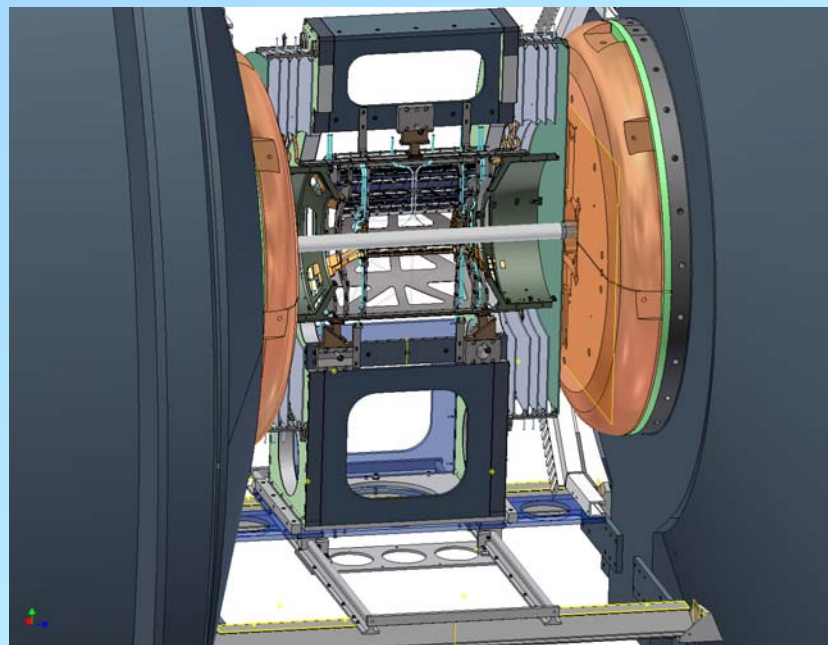
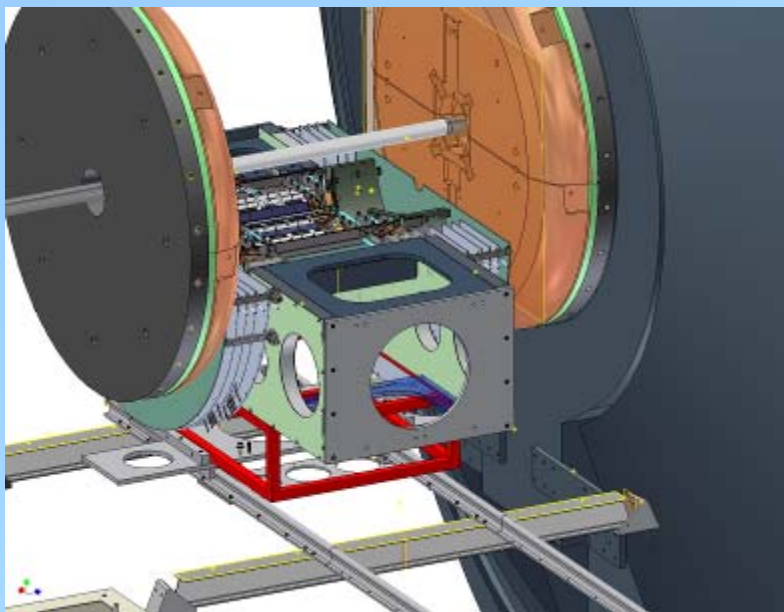
Bridge Work this shutdown

TECHNICAL SUPPORT 2010



These racks to be installed this summer

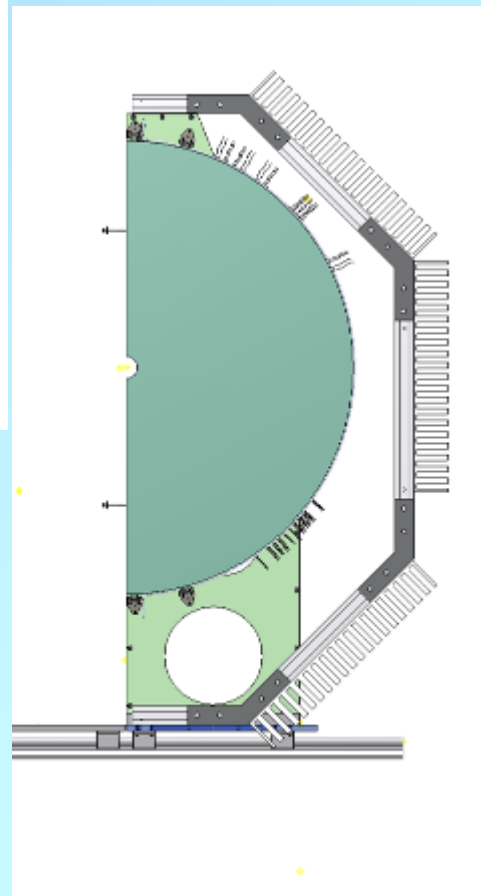
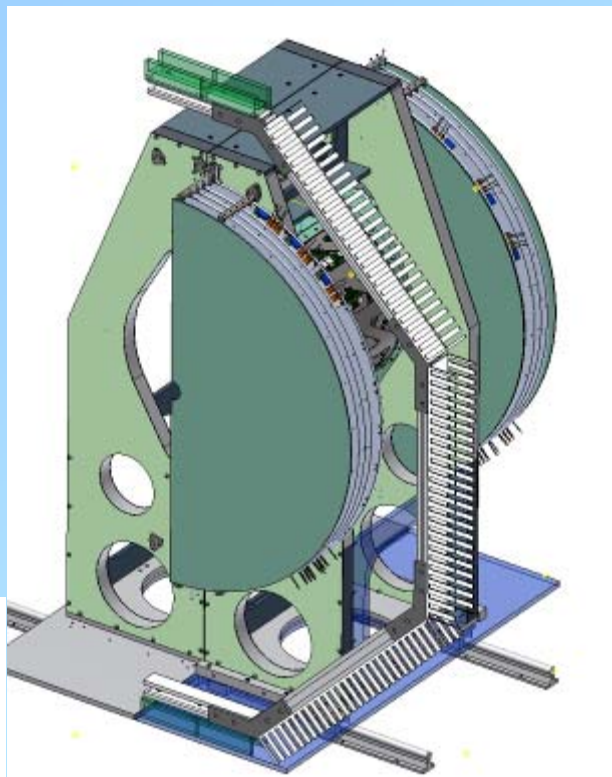
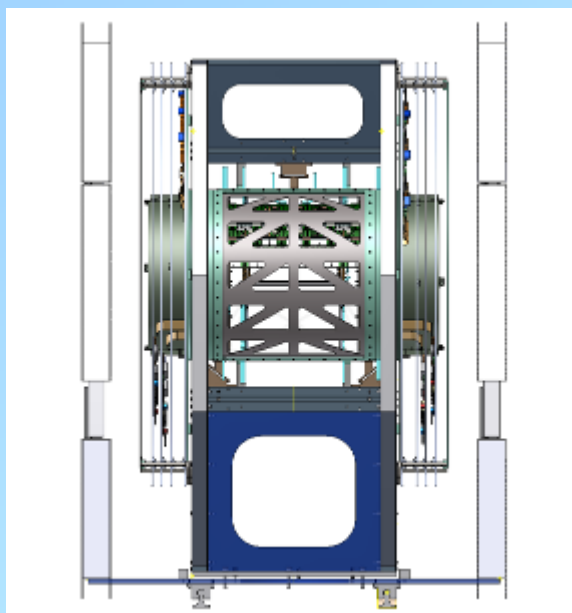
1. HBD, RXNP Racks to be removed intact
2. Remove electric panels from 2 north sections of bridge
3. Temporary support for water pipes and cable tray
4. Remove 2 north sections of bridge to enable absorber installation
5. Reinstall 2 north sections, reconnect plumbing and cable trays to 2 north sections of bridge
6. Upgrade electric service to support 8 racks
7. Install 1-3 racks for VTX/FVTX electronics

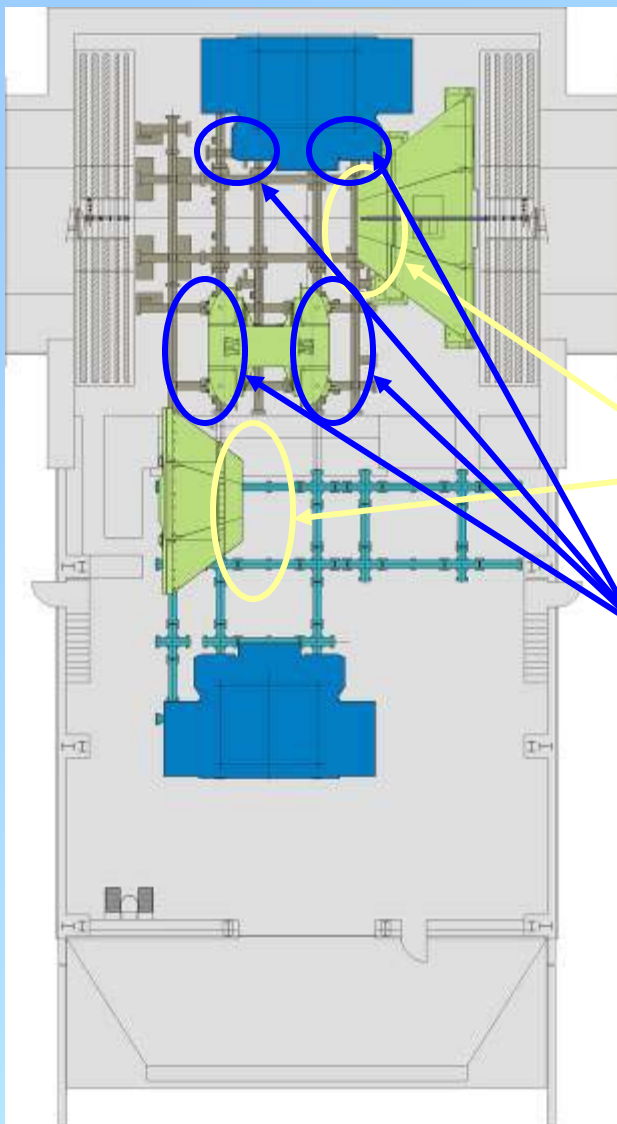


VTX Support Structure Base
Assembly and Installation Plan
in Progress

VTX cable tray concept

Similar to HBD





We expect the major PHENIX carriages and magnets to be in this configuration for most of August 2010. During this period the old PHENIX beampipe is removed, the north and south side of the CM is prepared for the absorber, the absorber is installed, work is done on MuTr and MuTrigger station 1, North and south and DC west.

Use CAD scissor-lift manlift to access work in these areas

Use (new?/PHENIX/CAD) manlift(s) to access work in these areas

Work on EC, MuTr and MuTrigger Stations 2 and 3, and other subsystems in the EC and WC may also be performed during this period by subsystem experts, but PHENIX tech assistance will be extremely limited or not available and additional scaffolding (e.g. inside Muon magnets will not be available), and manlifts will not be available for these efforts.

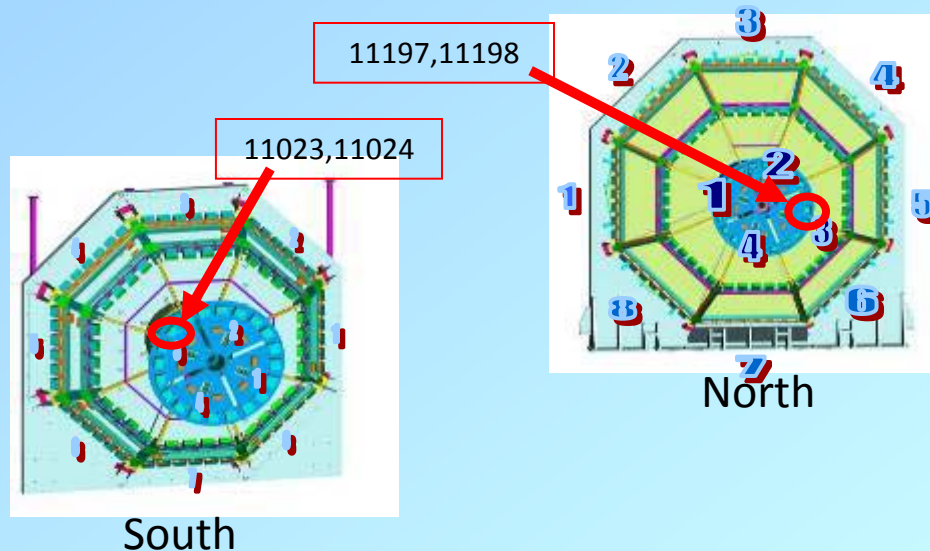
Shutdown 2010 - muTr FEE repairs 8/2-8/20

PHENIX

TECHNICAL SUPPORT 2010

FEE - one FEM in each station-1

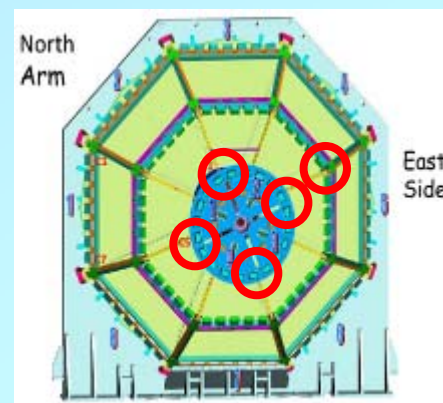
- 11023, 11024 - south S1 Q3 C2 (top); may be glink/clink RX module
- 11197, 11198 - north S1 Q3 C4 (bottom east); probably controller



Shutdown 2010 - Calibration cable termination repairs 8/2-8/20

Calibration cable connections - fix terminations

- north S1 - O2 G1; O3,4 G3; O6 G3; O8 G2 - all infinite termination now
- north S1 - O3,4 G1,2 - 57 ohms (rest all 105 ohms)
- north S2 - O5 G1 - $\frac{1}{2}$ gain of all others (probably can't reach)



Shutdown 2010 - MuTr HV

7/1-8/31

- disabled but cannot be reached (S271-6, S311-0, S331-2, N222-6, N341-0)
- S381-5 high current - also can't be reached?

Nothing can be done w/o scaffolding

Table with 10 columns: S271-6, S311-0, S331-2, N222-6, N341-0, S381-5, S381-6, S381-7, S381-8, S381-9. Rows show numerical values for each channel, with some cells highlighted in yellow.

Table with 10 columns: S271-6, S311-0, S331-2, N222-6, N341-0, S381-5, S381-6, S381-7, S381-8, S381-9. Rows show numerical values for each channel, with some cells highlighted in yellow.

Shutdown 2010 MuTr/MuTrigger - Other

muTrg, Itaru et al.

- south S3 O7 - threshold problem
- north S3 O1 - high noise (not reachable); S3 O4 - bad ADTX board

South arm disconnect/reconnect (fibers, power)

- lower glink/clink crates on top of eyebrow (to fit thru big IR door)
- move out/in; reconnect & test

Anode terminations

- station-1 gap-1 both arms - recap & terminate?
- station-2 all gaps, where we can reach w/o scaffolding (2 lower octants/arm) - terminate (under dry-air manifolds)?



New Beampipe Pre-Installation Prep

TECHNICAL SUPPORT 2010

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Send beampipe to CERN for NEG Coating	~ Done	CAD Vacuum
Choreograph removal of old beampipe and installation of new (final)	Done	PHENIX Design & Engg
Beampipe Installation Review (Final)	Done	Y. Makdisi ESRC
Design BP installation and survey tools/fixtures	6/30/2010	In Progress
Receive BP transitions & spool back at BNL from SAES after NEG Coating	7/31/2010	Mapes, Riggers to move from rec'g to CAD
Receive bp back at BNL	8/13/2010	Mapes, Riggers to move from rec'g to CAD
Final acceptance and inspection bp and sections	8/20/2010	Mapes, Riggers to move from CAD to PHENIX
Fabricate BP installation and survey tools/fixtures	8/20/2010	CS

VTX Subassembly, Top Assembly, Installation and Integration Prep

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2010

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
VTX Installation Plan	Done	PHENIX Design & Engg
Installation Review (ESRC)	Done	Set up With Y. Makdisi
Specify components, assembly tools and fixtures, electronics for racks, cables, cable management etc.	Done	PHENIX Design & Engg
VTX Survey Plan	6/30/2010	Consult w/ F. Karl
Design fixtures, techniques and mockups for installation, alignment and survey	6/30/2010	PHENIX Design & Engg
Beampipe & VTX Installation Work Permits	6/30/2010	D. Lynch, CAD Safety Approval
4 th of July Holiday	7/5-7/6/2010	Enjoy the long weekend
BigWheel Fabrication & Procurement	7/15/2010	PHENIX, CS
Receive, inspect, test, rework and qualify components, assembly tools and fixtures, electronics for racks, cables, cable management etc.	7/15/2010	PHENIX Design & Engg
Fabricate fixtures, techniques and mockups for installation, alignment and survey	8/31/2010	CS, PHENIX Techs
Assemblies, Mock installations/alignments, bench tests	8/31/2010	PHENIX Techs
Receive & inspect components (installation, support, alignment & Survey)	9/15/2010	PHENIX Techs
Cooling system procurement	9/30/2010	Pisani Coordinate with CAD Cooling Water, Electricain

6/24/2010

RPC3 Pre Shutdown Prep

TECHNICAL SUPPORT 2010

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Prepare Installation Plan	Done	Done
Design Absorber Installation fixtures & tools	Done	PHENIX Engg & Design →
Receive purchased parts	Done	PHENIX Techs →
Fabricate PHENIX parts	Done	CS, PHENIX Techs →
Receive and inspect CS fabricated parts	Done	PHENIX Techs →
Prepare work permit for installation	Done	Currently at CAD Safety Approval
Pre-Assemble base components at PHENIX	Done	PHENIX Techs
Assemble, test and burn-in 1/2 octants	7/31/2010	In Progress @ RPC Factory →
Fabricate Absorber Details	7/31/2010	In Progress @ Vendor & CS - RPC Group and PHENIX
Fabricate/procure Absorber Installation fixtures & tools	7/31/2010	In progress @ CS, Lifting Fixture approval in progress PHENIX Techs

Start of Shutdown

PHENIX

TECHNICAL SUPPORT 2010

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
DAQ Tests	Done	PHENIX
Purge Gas From Detectors	Done	PHENIX, CAD remove LOTO
End of Run 10	Done	☺
EOR Party	Done	Commando Grill Squad
Remove BP Collar	Done	Done
Move MMS south	Done	PHENIX Techs
Prep EC for move to EC	Done	PHENIX Techs
Close North and South BP gate valves and lock closed for until new BP is installed	Done	CAD Vac Group
Open and disassemble wall	Done	Done
Remove EC ladder and fold platforms	Done	Carpenters & Riggers
Move EC to AH	Done	PHENIX Techs
Install cart	Done	PHENIX Techs
Move Collars to AH	Done	PHENIX Techs
Install decking	Done	PHENIX Techs
Install Manlift	Done	PHENIX Techs
Remove RPC2 Prototype, support brackets, cabling & Piping	6/25/2010	In Progress PHENIX Techs, CAD Techs , Electrician
Remove MMS east vertical lampshade	6/25/2010	CAD Techs

6/24/2010

Beampipe De-installation

TECHNICAL SUPPORT NO-0

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
4th of July Holiday & Floating Holiday	7/5&7/6/2010	Enjoy
Remove HBD's and HBD cables Remove RXNP's and cables	7/9/2010	PHENIX Techs ASAP
Remove MPC's	7/16/2010	PHENIX Techs ASAP →
Remove BBC's	7/16/2010	PHENIX Techs ASAP →
Position MMS for Vacuum break	7/19/2010	PHENIX Techs
Install Temporary supports for old BP	7/19/2010	Supports TBD →
Break vacuum on north side of MMS	7/19/2010	CAD Vac Techs
Remove south bellows	7/19/2010	CAD Vac Techs →
Move MMS north, remove spool and south3-5 transition	7/20/2010	PHENIX Techs
Move the MMS south & Prep MMS for move to AH	7/23/2010	Begin MMS prep with shutdown start →
Move CM south, remove north bellows	7/23/2010	PHENIX & CAD Vac Techs
Move old Be bp south into MMS and move CM north	7/23/2010	PHENIX Techs →
Move MMS to shutdown park position	7/23/2010	PHENIX Techs →
Remove old Be BP	7/23/2010	PHENIX Techs →
Move CM south and east	7/23/2010	PHENIX Techs →
Remove north 3 to 5 transition	7/23/2010	PHENIX Techs →

6/24/2010

New Beampipe installation

PHENIX

TECHNICAL REPORT NO-0

Task	Due By	NOTES
Prepare north 3 to 5 transition for installation with roller guides, bakeout wrap and thermocouples	8/13/2010	PHENIX Techs & CAD Vacuum Techs
Prep CM North and South for Absorber and install	8/13/2010	PHENIX Techs
Install north 3 to 5 transition in MMN	8/13/2010	PHENIX Techs
Install new Be pipe in CM on temp supports	8/17/2010	PHENIX Techs
Move CM back to beamline & connect new Be BP to 1-5/8 transition and bellows and north 3-5 transition	8/17/2010	PHENIX TechsPHENIX Techs
Move CM to run position	8/18/2010	PHENIX Techs
Prealign Be/Alum pipe with transitions attached on new BP supports At MPC north, BBC south and north nosecone	8/19/2010	Surveyors & PHENIX Techs
Prepare south 3 to 5 transition for installation with roller guides, bakeout wrap and thermocouples	8/19/2010	PHENIX Techs
Install south 3 to 5 transition, bellows and 1-5/8 to 3" transition in MMS	8/20/2010	PHENIX Techs
Move MMS back into IR on beamline	8/20/2010	PHENIX Techs
Move CM south, slide Transition assembly in MMS north and connect to new Be BP	8/20/2010	CAD Vac & PHENIX Techs
Move CM and MMS north and install south spool. Leak check. Move MMS South	8/27/2010	PHENIX Techs
Install temporary bakeout supports	8/27/2010	PHENIX Techs
Install bakeout blankets and monitoring	8/27/2010	CAD Vacuum Techs
Labor Day Lab Holiday	9/6/2010	Enjoy
Bakeout New BP and activate NEG coating	9/10/2010	CAD Vacuum Techs
Leak check BP	9/10/2010	CAD Vacuum Techs
Re-install MPC's & BBC's including Cables and services	9/24/2010	PHENIX Techs Concurrent
Move CM to run position	9/24/2010	PHENIX Techs
Final alignment of new BP	10/1/2010	PHENIX Techs

May be 1-2 week slide in this area

6/24/2010

VTX Installation, VTX Services and Electronics

PHENIX

TECHNICAL SUPPORT 2010

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Presurvey VTX $\frac{1}{2}$ detectors in Chemistry lab	10/1/2010	PHENIX TECHS and BNL Survey, 1 week
All VTX detector, support, installation, alignment and survey parts and assemblies complete, ready for installation	10/1/2010	All sources
Install and align VTX rail attachment hardware to CM	Done	Using the HBD I-beam attachment hardware
Install and align VTX rails parallel to beam line	Done	Using the HBD I-beams
Install and align VTX rails perpendicular to beam line	10/8/2010	PHENIX Techs
Install and align west half detector module	10/15/2010	PHENIX Techs & Survey
Install and align east half detector module	10/22/2010	PHENIX Techs & Survey
Install mechanical support structures for VTX services and electronics	10/29/2010	PHENIX Techs Concurrent Effort
Install Cable trays	10/29/2010	
Install racks	10/29/2010	
Install chiller	10/29/2010	
Install cables, plumbing	10/29/2010	
Connect cables and plumbing	10/29/2010	V
Thanksgiving and Black Friday Holiday	11/25 & 11/26/2010	Enjoy
Test, de-bug and commission	12/1/2010	PHENIX Techs

6/24/2010

RPC3 South Prep, Early Shutdown

PHENIX TECHNICAL SUPPORT 2010

Task	Due By	NOTES
Remove wiring, walkovers, FCAL and scintillator hardware that would otherwise interfere with installation	In Progress	PHENIX Techs
4th of July Holiday	7/5 & 7/6	Enjoy
Remove/relocate shielding	Done	Riggers
Remove crystal palace & vapor barrier	Done	CAD
Inspect Gap 5 south for legacy items/problems	6/25	PHENIX Techs <i>in progress</i>
Address legacy items/problems as convenient prior to shutdown start	7/15	PHENIX Techs
Install lighting & relocate sensors as necessary	7/15	Electrician <i>in progress</i>
Temporarily relocate, re-position or otherwise address interfering piping, cable trays	8/6/2010	PHENIX (w/ CAD Help?), Electrician
Remove RPC prototype	8/6/2010	PHENIX/CAD Techs
Pre-survey $\frac{1}{2}$ octant reference points	8/13/2010	PHENIX Techs & Surveyors
Drill and tap $\frac{1}{2}$ octant and rotating piston mounting points	8/13/2010	PHENIX Techs
Build/install access and work platforms for walk on top of MuID steel including stairs from MMS eyebrow	8/13/2010	Carpenters
Final cleaning and prep of gap 5 for grouting	8/20/2010	PHENIX Techs
Labor Day Lab Holiday	9/6/2010	Enjoy
Pre-installation orientation meeting with masons and riggers	8/20/2010	PHENIX Techs Masons & Riggers
Position lifting equipment in tunnel	8/27/2010	Riggers
Move east and west base structures into south tunnel and assemble on east and west sides of pedestal respectively. Include translation control fixtures	8/27/2010	Riggers & PHENIX techs

Want to accelerate these items, if possible

so that

we can get to these items as soon as possible.

6/24/2010

RPC3 South Installation



TECHNICAL SUPPORT 2010

Task	Due By	NOTES
Install and align base structures on east and west sides of gap 5	9/3/2010	PHENIC Techs & Riggers
Prepare for grouting	9/3/2010	PHENIC Techs & Masons
Install grout	9/3/2010	PHENIC Techs & Masons
Install pitch control rails on pedestal and gap 5 east & west inner walls	9/3/2010	PHENIC Techs
Install upper suspension support hardware	9/3/2010	PHENIC Techs
Install $\frac{1}{2}$ octants, 2 at a time in accordance with work plan/work permit	10/1/2010, sooner is better	Riggers & PHENIX Techs
<i>Transport $\frac{1}{2}$ octants 2 at a time from RPC factory to south tunnel on angled transport carts</i>		
<i>Transfer $\frac{1}{2}$ octants from angled transport carts one at a time to temporary free standing and re-orienting roller fixture (fore and aft wheels and axel)</i>		
<i>Lift (and re-orient if appropriate) $\frac{1}{2}$ octant and install into base structure, previously installed $\frac{1}{2}$ octant or upper suspension hardware as appropriate per work plan</i>		
<i>Pre-align each $\frac{1}{2}$ octant as installed</i>		
<i>Perform electrical integrity tests before proceeding to next pair of $\frac{1}{2}$ octants</i>		
<i>After all $\frac{1}{2}$ octants are in place and tested, join east and west halves of full south station 3 detector and align to survey markers</i>		

6/24/2010

RPC3 South Integration

TECHNICAL SUPPORT NO. 0

<u>Task</u>	<u>Due By</u>	<u>NOTES</u>
Final survey	10/8/2010	Surveyors
Install new cable trays and piping supports	10/15/2010	Electrician, PHENIX Techs earlier if possible
Re-install MuID wiring and pipes	11/5/2010	PHENIX Techs
Install south thermal/vapor barrier	11/19/2010	CAD contractor
Thanksgiving and Black Friday Holiday	11/25 & 11/26/2010	Enjoy
Re-install MuID gas rack	11/30/2010	PHENIX Techs
Commissioning and final acceptance tests	11/30/2010	RPC Group
Install RPC3 HV, LV and signal wiring and gas lines	11/30/2010	PHENIX Techs
Install RPC3 South gas distribution rack	11/30/2010	PHENIX Techs
Re-install shielding	11/30/2010	Riggers
Install RPC3 South environmental controls (heaters and thermostats)	11/30/2010	Electrician

We want to get this task started immediately after last $\frac{1}{2}$ octant is installed, so we can finish no later than this date

Shutdown 2010 Other Work

TECHNICAL SUPPORT 2010

<u>Task support</u>	<u>Due By</u>	<u>NOTES</u>
Gas Pad expansion completion (grouting)	Done	Tasks TBD
RPC3 North unfinished business	7/15/2010	Electronics and cabling, grounding issues, environmental controls
MuTrigger FEE unfinished business	7/15/2010	MMS cable trays, →
RHIC Summer Sunday Tour	8/8/2010	During bakeout →
DC/PC maintenance/repair (after EC is in)	11/15/2010	FEM and wire troubleshooting and repairs, major efforts will require longer shutdown
Thanksgiving and Black Friday Holiday	11/25 & 11/26/2010	Enjoy
PHENIX Survey Review	11/30/2010	PHENIX Techs & Survey
Procedure Updating	11/30/2010	PHENIX Engineering
Gas Mixing House maintenance & Repair	11/30/2010	Tasks TBD
PHENIX Infrastructure maintenance, repair, upgrade	11/30/2010	TBD
Gas Pad: new gas storage details	11/30/2010	Tasks TBD
Gas Pad services for new dewar support, maintenance and improvements	11/30/2010	TASKS TBD

Shutdown 2010 Other Work (Cont'd)

TECHNICAL SUPPORT 2010

<u>Task support</u>	<u>Due By</u>	<u>NOTES</u>
AH Flood prevention improvements	11/30/2010	Tasks TBD
IR Bridge Electrical service upgrade	11/30/2010	Support for 4 full racks in 2010, 4 more (8 total) in future, PHENIX Techs & Electrician
RPC Factory Support	11/30/2010	Tasks TBD
Rack Room upgrade	11/30/2010	Tasks TBD
PHENIX Design Documentation	11/30/2010	PHENIX Engineering
CM Crane	11/30/2010	Currently on hold for re-evaluation
CM alignment stops	11/30/2010	TBD
Gas System maintenance, repair, upgrade	11/30/2010	Tasks TBD
Other subsystem maintenance, repair/upgrade	11/30/2010	Tasks TBD
Future upgrade support	11/30/2010	RPC1, FVTX, FOCaI, other Tasks TBD
Prepare for Run 11: EC platforms fold up in AH, fold down in IR, EC Equipment lift take down in AH, Install in IR, Install shielding wall base and build shielding wall & Install MMS Lampshade	11/30/2010	Normal end of shutdown tasks, typically taking 3-4 weeks: Riggers & Carpenters, CAD Techs
Run 11 Start	12/1/2010	
End of Shutdown Party	~12/3/2010	

2010 Building Maintenance Issues

TECHNICAL SUPPORT NO-0

- Roof leaks in utility bathroom at northwest corner behind tech offices, over door between rack room and assembly hall and over door between control room and elect. ass'y room.
- General maintenance for Trailer Offices (in progress)
- Trailer Office Modifications planning in progress (new exterior siding)
- Roof leaks in laser room and IR (southeast corner)
- Flooding in AH/ Driveway heaving [Lake PHENIX]



Progress?



6/24/2010



To be located in front of
AC on east side of GMH

Proposed shed addition to Gas Mixing house

Purpose: to house/store
larger bottles for R134A to
keep up with TOF West &
RPC requirements. No
flammable gas, standard
shed with heat. Barn style
doors desirable. Place on
asphalt with no threshold to
allow bottle management
with pallet lifter.

PHENIX Procedure Review Current Status:

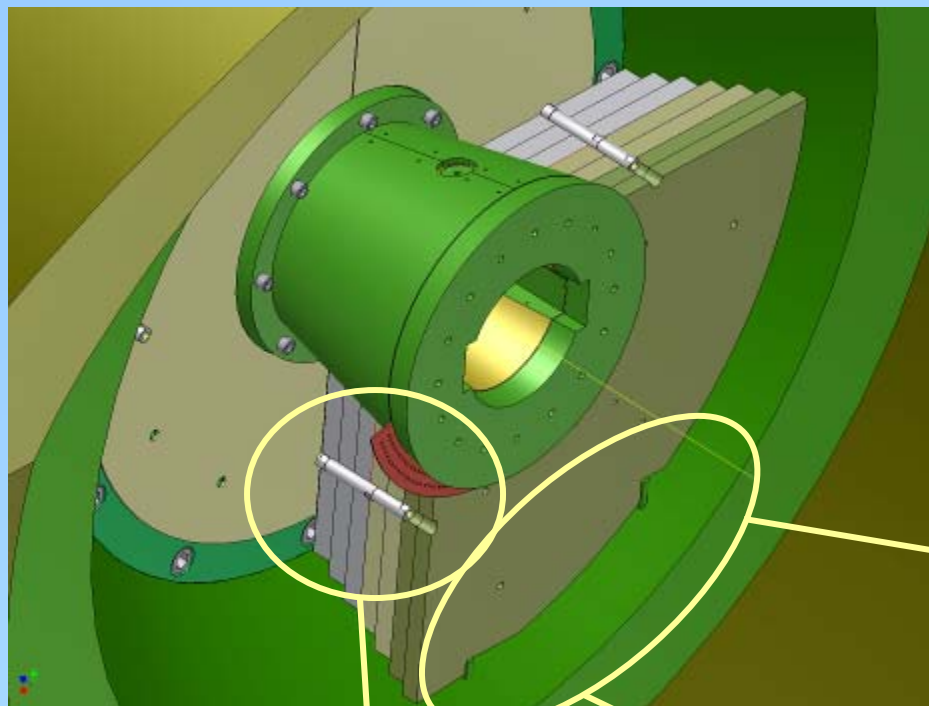
147 Procedures Identified

- 85 Made Inactive (not currently in use, will require revision to re- activate if and when necessary, available for reference purposes)
- 9 CAD procedures relevant to PHENIX, 7 are current and up-to- date (on CAD website), **2 more up dated, need to be posted.** (These are accessed via CAD website.)
- 42 PHENIX approved procedures.
 - 1 is currently under review
 - 41 are current and up-to-date **(3 of these soon need updating)**
- 11 Proposed/Draft Procedures (never previously formalized) **(3 are ready for review)**

Web retrieval of latest procedures now available from PHENIX Internal:

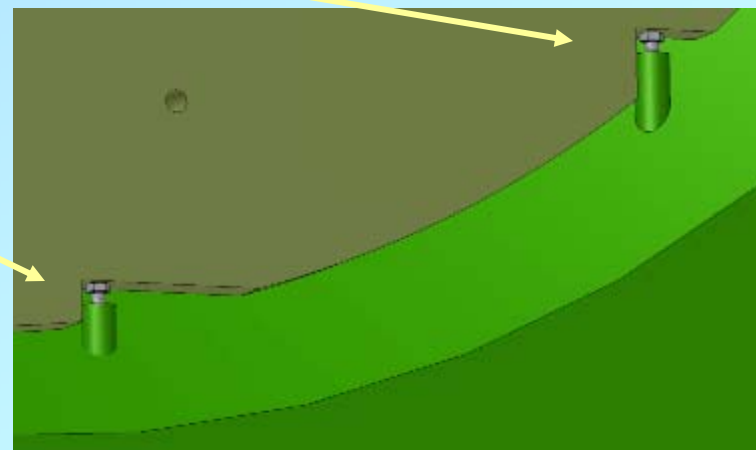
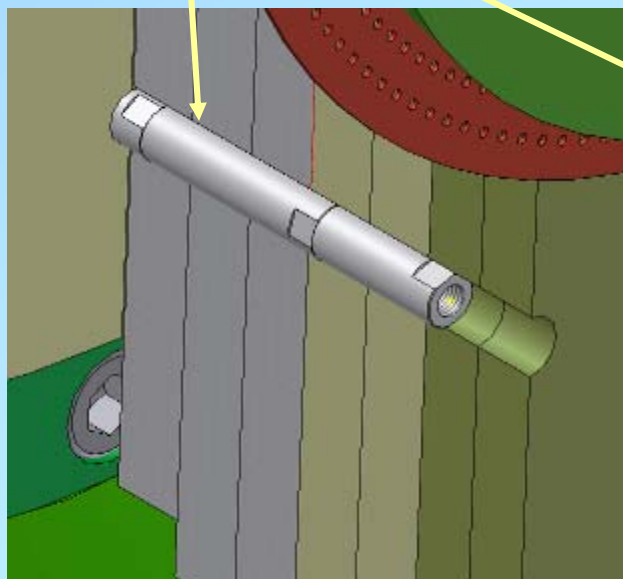
http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_procedures.htm

TECHNICAL SUPPORT 2010



RPC Absorber Final Design

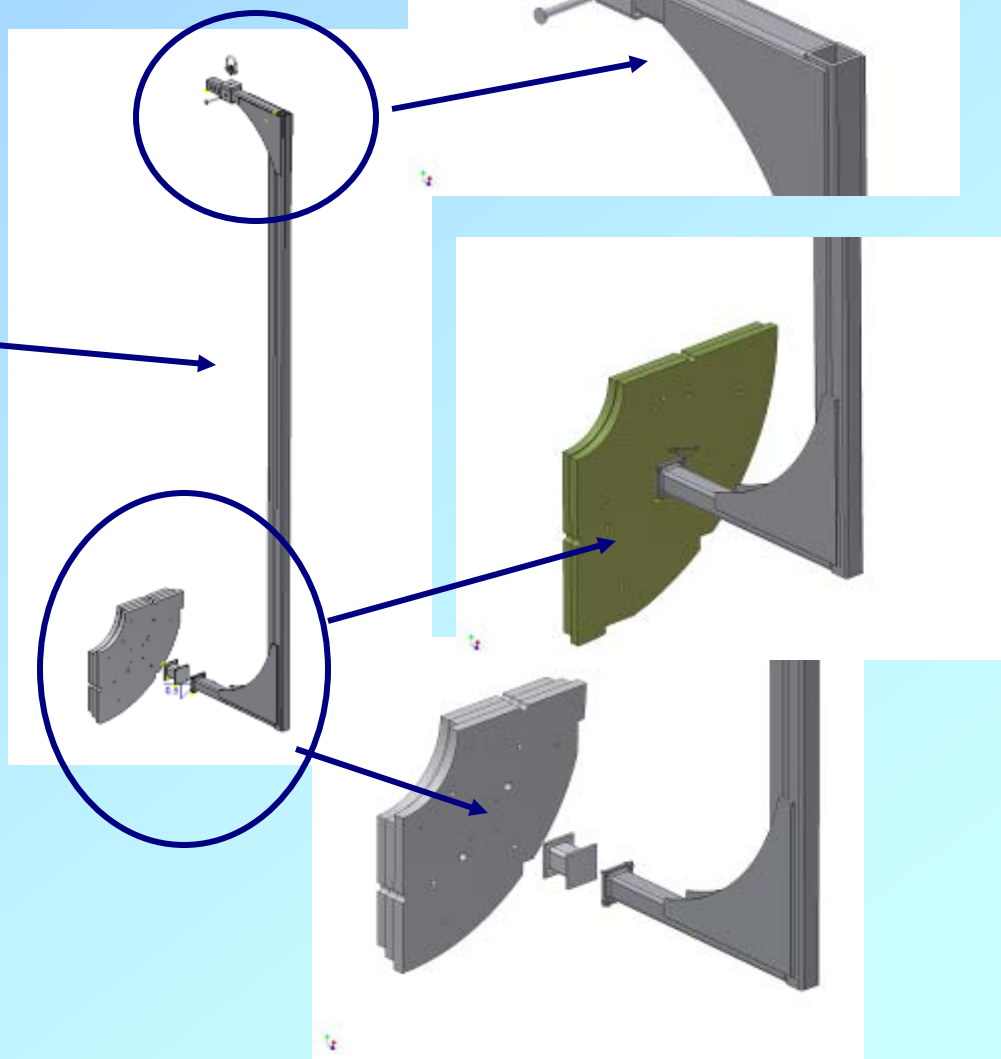
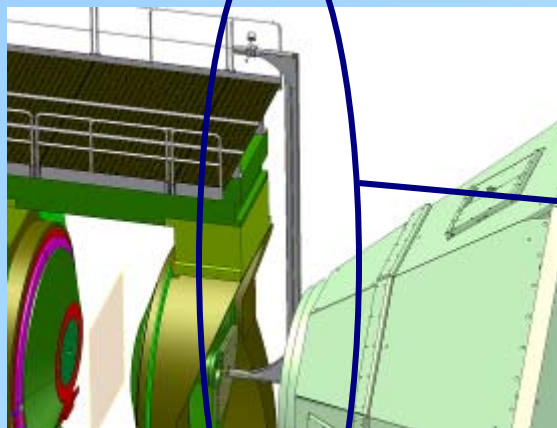
- Welded & tapped vertical support bossess
- 3 stage positioning rod

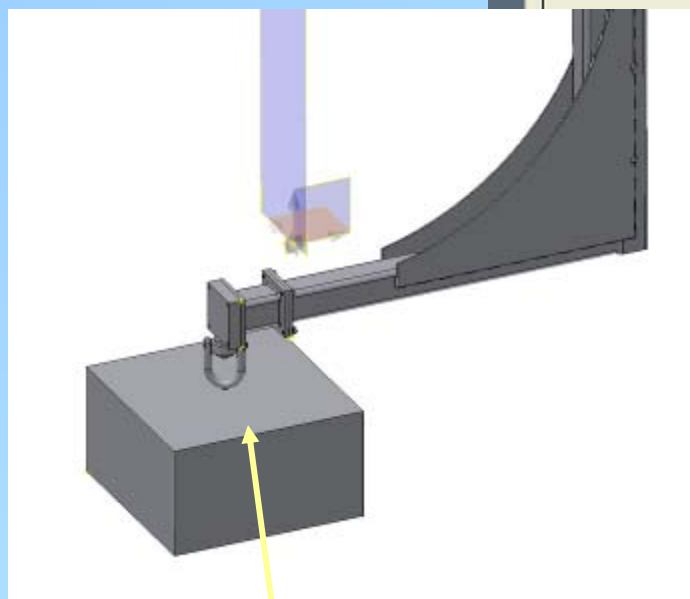


Absorber PO has been placed with ATLAS Tool and Die Works (Chicago)

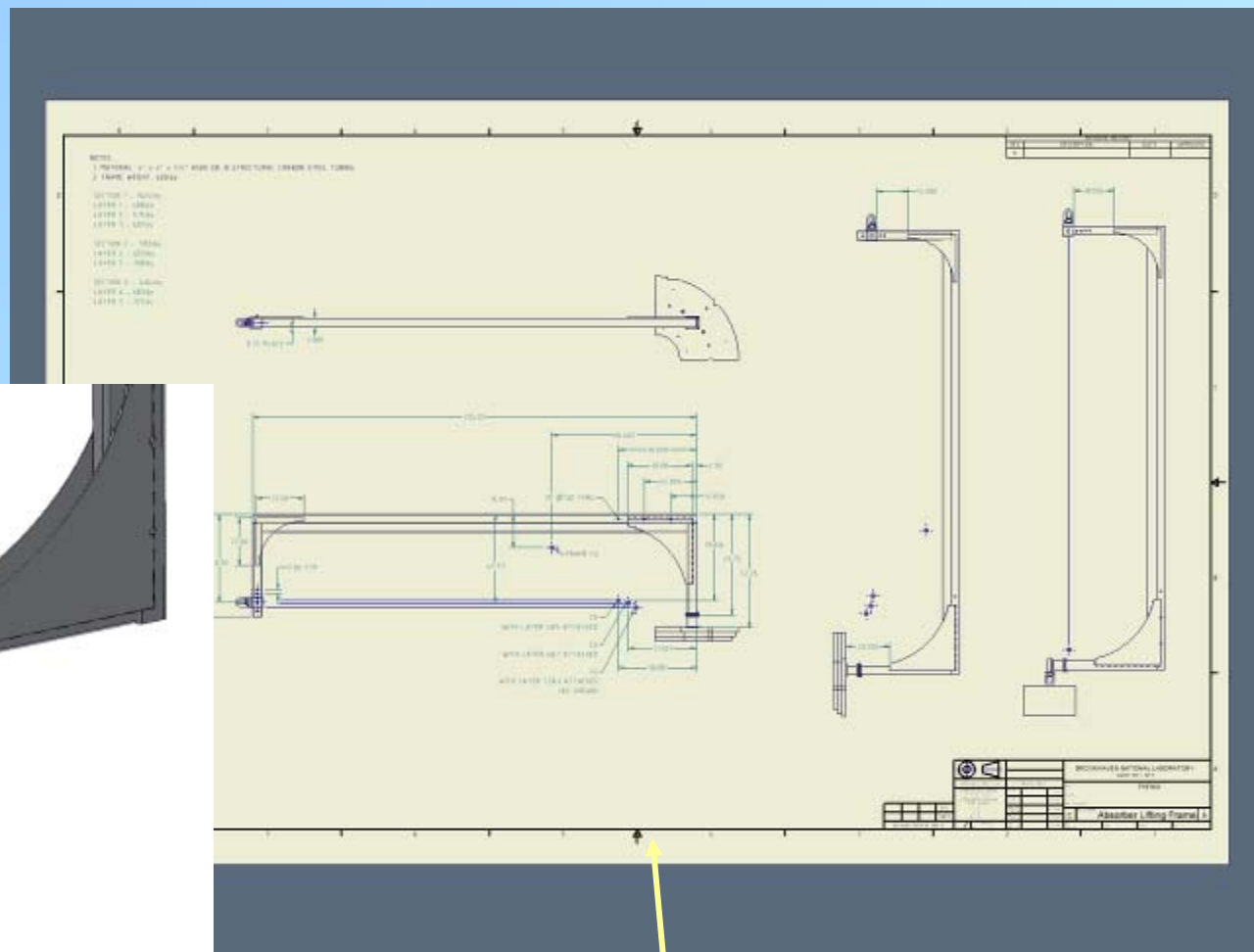
Absorber Instalation Concept

TECHNICAL SUPPORT NO-0





Design for absorber lifting fixture test arrangement



Absorber Lifting Fixture, initial design is complete, analysis in progress

Safety, Security, Etc.

1. List of persons eligible for film badges to go in south tunnel has been approved and I have been given authority to add to list. See me if you need to get access/film badge.
2. All BNL personnel must take the 10CFR835 Update training - (10 minutes no test) If you haven't received an email to do so you probably will. Take the course by 6/30/10
3. BNL safety requires bicycle lights for after-dusk riding on-site. Bike lights are now stock items (H27736).
4. Installation Reviews, Action Items:

RPC3S

- Review the design of the new cable tray to assure NRTL compliance (Sandberg July 30, 2010)
- Review the refitted flammable gas piping, test and associated documentation (Phillips, Gaffney October 30, 2010)
- Assure that appropriate fall protection is in place for the RPC installation (Phillips, Cirnigliaro July 30, 2010)

Absorber

- Submit the new lifting fixture design and structural analysis for review by the C-AD chief mechanical engineer (Lynch, June 20, 2010) (Done)
- C-AD to check the calculations and review and submit to the Laboratory Safety Committee for approval (Tuozzolo, Snyderstrup June 30, 2010)
- Test and certify the lifting fixture to 125% of rated load (Kane, Gaffney, Lynch July 30, 2010)

4. Installation Reviews, Action Items (continued):

VTX

- Assure the installation of stops on the rails to protect the beam pipe. (Lynch, Phillips Oct 1, 2010)
- Provide the flow rate of dry nitrogen into the VTX (Pisani, Oct 1, 2010)
- Provide the engineering report of the interconnections of the VTX cooling system (Lynch / Gaffney Oct 1, 2010)

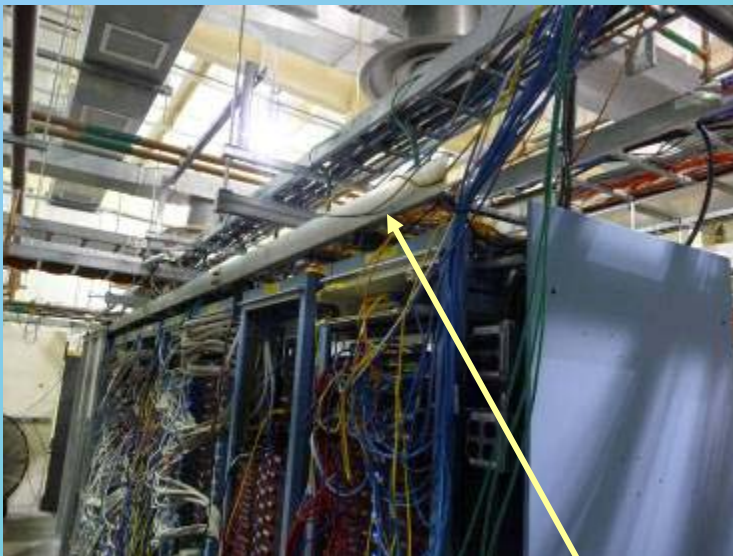
Beampipe

- No action items from the ESRC

Rack Room Gutter Cleaning

- Soon we are replacing the main Event Builder Switch with our new flagship switch.
- Means a lot of cable pulling in the “Event Builder Aisle”
- In particular the cable tray on top of the rack has a lot of sediments which would benefit from a start from scratch

This is how it looks



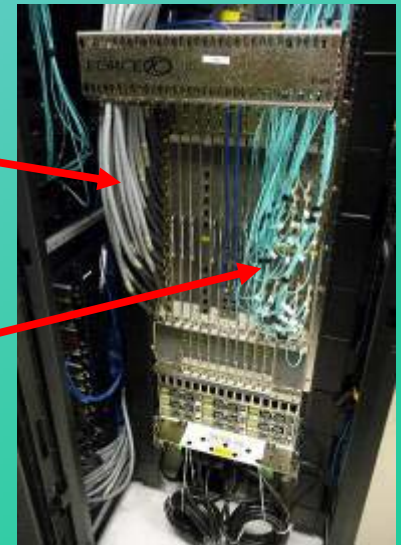
- **The Event Builder Aisle**
- **This is the tray I'm talking about**

Standard Gigabit ports

“MRJ-20” cable bundles with 6 Gig ports each go to patch panels (or directly to the machines) May make our cable distribution easier, bring a few bundles to the racks

10GbE ports

The future Switch

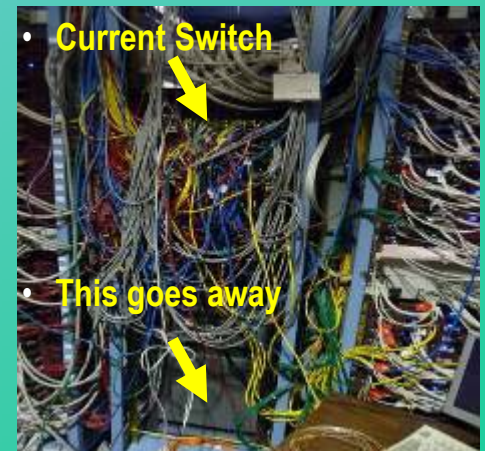
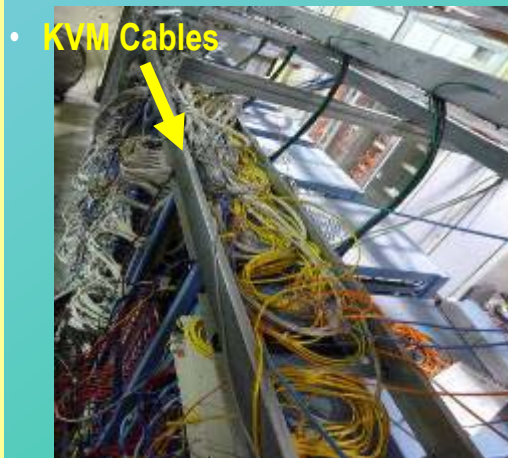


The Task

- We'll rig up a few alternate connections to the first two racks to keep them alive (I do that)
- We disconnect all network cables (about 150 or so) and pull them out, roll them up without tangling them up, remove labels
- More than 100 are local to the rack row, about 50 go somewhere else
- There are fibers mixed in, they have to go out first
- Not by count but by bulk the KVM cables are the biggest, they stay, but it looks like many of them are on top
- From above this doesn't look like much, but on the ground it looks like a big deal

- When our run ends, we can get going (early June)
- Find some room to coil up the pulled cables
- Devise a good labelling scheme for the future
- Then think about putting the new stuff in
- 2 weeks? Reasonable?

Tray from above and below



Where To Find PHENIX Engineering Info



Summer is officially here:

Be safe:

Swim with a buddy

Use sun screen (lots)



Don't use gasoline to start your grill



All things in moderation



Links for the weekly planning meeting slides, archives of past meeting slides, long term planning, pictures, videos and other technical info can be found on the PHENIX Engineering web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

